ABSTRACT
Research on bullying has been hampered by the lack of consistency in terms of how bullying is defined and measured. There is, at present, a lack of trustworthy information regarding this phenomenon, and it is likely that the divergence in the information obtained can be attributed to the lack of consensus among experts and those interested in the field. Thus, this article proposes, after a general review of the case, to present the development of a transnational scale to measure bullying and other forms of peer victimization at the secondary school level in a sample of public middle schools in the Northwestern United States.
INTRODUCTION

Bullying and bullying-related behavior continue to be a significant problem for many schools, both in the United States and in many other parts of the world. Recent research suggests that between 20-30% of students experience bullying and a significant proportion of these are bullied on a regular basis (Davidson & Demaray, 2007; Nansel et al., 2001). Research also suggests that bullying has both immediate and long-term effects on students' well being including loss of self-esteem, increased depression, anxiety and other mental health concerns, and negative attitudes toward school that are frequently the basis of uneven attendance, nonparticipation, and eventual dropout (Frey et al., 2012).

Although considerable progress has been made over the past decade in understanding some of the factors that contribute to bullying both in and out of schools, research has been hampered by the lack of consistency in terms of how bullying and other forms of peer victimization are defined and measured. There is a need at this point for development of a research instrument that provides reliable and valid data with regard to the incidence and prevalence of various forms of bullying, associated factors both within individuals and the environment, and how engagement in bullying impacts both bullies and their victims. At present, there is a tremendous lack of consistency in the data collected across various studies. For example, some studies report bullying occurring at a rate of 3 to 5% of the sample, while others report rates as high as 40 to 50% (Cetain et al., 2011). From a research perspective, such inconsistency raises questions about the validity of the measures currently being used. It may well be that the divergence of information collected is attributable to a lack of consensus about how to measure bullying and other forms of victimization. Hence, one of the primary objectives of this study is to develop a cross-national scale to measure bullying and its effects among secondary level students (age range approximately 12-18). This is necessary if valid cross-national research is to be carried out in the future.

This paper will begin with a review of what we know about bullying including developmental and school factors that contribute to an increased incidence of bullying, and the immediate and long-term effects of bullying upon those that are victimized. The review will address traditional forms of bullying such as physical aggression, verbal threats, and teasing as well as more contemporary forms of bullying, such as that delivered via electronic means (i.e., cyber-bullying). Following the review we will describe the development and validation of a new international measure, the Bullying and Victimization Scale for Youth (BVSY), designed to assess bullying and other forms of peer victimization among secondary level students. We will present preliminary data derived from administering the scale to some 1200 secondary public school students in the Western United States.

OVERVIEW OF BULLYING

Bullying is differentiated from other acts of peer aggression by an imbalance in power between the aggressor and the victim and by the fact that it tends to occur repeatedly over time. Bullying is most often considered

Keywords: measurement scale, bullying, United States, middle school.
as including acts of physical aggression or intimidation but also includes verbal aggression such as threats and hurtful teasing, as well as relational aggression, which may involve social exclusion or spreading negative misinformation (rumors) designed to reduce social status. More recently, there is widespread concern about bullying that is perpetuated via the Internet or through mobile devices. “Cyber-bullying” or “cyber-aggression” poses an additional threat to children and youth, particularly in more developed regions of the world (Smith, 2012). Research indicates that bullying and being bullied, whether through traditional or “cyber” modes, are associated with poorer social and emotional adjustment throughout the lifespan (Frey et al., 2012).

Bullying has the potential to inflict physical harm on the victim, but also has substantial psychological consequences for both the bully and the victim. By engaging in this behavior, bullies develop a dysfunctional interpersonal style, which is centered on the use and exertion of power over another individual. Research indicates that the long-term consequences for children who bully are negative, which is emphasized by their increased risk of being arrested for violent crime as an adult (Olweus, 1991). A growing body of research documents the association of bullying aggression and victimization to psychological and behavioral problems in victims including depression, anxiety, low self-esteem, and externalizing behavior problems (Craig, 1998; Grills & Ollendick, 2002; Hampel et al., 2009; Kaltiala-Heino et al., 2000; Shin, 2010). Bullying victimization interferes with current and future school functioning, including engagement in learning, attitudes toward teachers and school, and academic achievement (Buhs et al., 2006; Kochenderfer & Ladd, 1996).

**Bullying forms and topography**

Although there is a growing literature on bullying and its potential impact on victims, much less is known about the differential effects of various forms of bullying including physical, relational, and cyber modes of bullying. There is some speculation among researchers, for example, that cyber forms of bullying may produce more devastating effects due, in part, to its anonymity and “around the clock” nature (Smith, 2012). In addition, there are substantial individual differences in responses to victimization, suggesting, for example, that certain protective factors may serve a buffering role in the face of chronic bullying. To date, however, there is a lack of data on what exactly constitutes a protective factor in response to bullying and how such factors may be promoted among youth.

With the expansion of access to digital media, there is increasing focus on how youth may be using cyberspace as the vehicle through which to aggress against their peers. The popular media and researchers have adopted the term cyber-bullying to describe this phenomenon. Cyber-bullying occurs largely outside of any potential visibility of adults, can happen instantaneously, opens the opportunities for multiple or repeated victimization within a short time period, and occurs in a context in which the victim may be relatively helpless to prevent or respond. In this regard, cyber-bullying is more similar to verbal harassment (e.g., name calling or intimidation threats) and relational aggression (e.g., spreading or demeaning rumors or being ostracized from a group) then it is to physical forms of bullying (e.g., physical attacks or extortion of money). Currently, the most widely used definition of cyber-bullying is: “the intentional and repeated harm of others through the use of computers, cell phones,
and other electronic devices” (Hinduja & Patchin, 2008, p. 5). As such, cyber-bullying is considered to be that subset of verbal and relational aggression that involves the use of digital media to victimize others. This can include the use of instant messaging, social network sites, chat rooms, and e-mails with which to disseminate cruel or demeaning messages to individuals or to threaten or harass individuals using text, photos, videos, audio recordings, or multimedia forms.

**Developmental Trajectory**

A great deal of research over the past two decades has contributed to our knowledge of the origins and impact of bullying in schools. Conventional wisdom has it that bullies engage in aggressive, intimidating behavior toward others in an effort to compensate for low self-esteem. Recent research, however, suggests this is not the case. Bullies actually have above average, bordering on inflated, self-esteem that may underlie a need to dominate others. What is certain is that much of bullying behavior is reinforced by the benefits derived from controlling others. In addition, bullies often gain the secondary approval of peers who admire and imitate their behavior.

Children most susceptible to bullying may be characterized as physically weak, emotionally vulnerable, and lacking in social skills. Research indicates that chronic bullying victims rarely ask adults for help and their plight may be unknown, even to teachers who interact with them on a daily basis. Left undeterred, both bullies and their victims tend to remain in their roles throughout the elementary school years and into secondary school.

What are the origins of bullying in childhood? As a subclass of aggressive behavior, bullying is clearly influenced by the behaviors of adults who serve as primary role models. Many parents of school bullies condone the use of physical force as a means of resolving conflict and are likely themselves to rely upon corporeal punishment in an effort to control their children. Bullies are more likely than other students to have been physically abused by parents or older siblings and to lack adequate levels of parental supervision.

Peer factors also appear to be critical to the instigation and proliferation of bullying in schools. Bullies enjoy the adulation they frequently receive from peers and tend to orchestrate bullying opportunities in the interest of maximizing peer attention. Rarely do bullies operate in isolation.

School factors, including school ecology, play a vital role in bullying on campus. Bullies thrive in school environments characterized by high student-teacher ratios, inadequate supervision, and lack of a school wide policy that not only prohibits bullying but also consistently encourages and reinforces prosocial behaviors. Teachers and other school personnel can also play an important enabling role if they fail to respond to early incidents of aggression including teasing, pushing, shoving, and other relatively innocuous forms of antisocial behavior.

**Current Research Project**

The purpose of this research was to develop a comprehensive self-report measure of bullying-victimization for secondary level students that focuses on physical, relational and cyber-forms of aggression. Our intent was to document the prevalence and impact of bullying in its various forms on students' academic, social, and emotional functioning. In addition, we were interested in the potential importance of individual, school, and family protective factors.
that may insulate adolescents against the negative impacts of cyber- and other forms of victimization. We constructed our scale by selecting items from several existing scales, including the California Bullying and Victimization Scale, the California Health Kids Survey Resiliency Module, the Strengths and Difficulties Scale, and various measures of positive psychological dispositions, including the Gratitude Scale, the Life Orientation Test, the Grit Scale, and the Subjective Happiness Scale. One of our long-term goals is to create a set of victim typologies to assist us in better understanding individual differences in negative social, emotional, and academic outcomes related to bullying, as well as the protective value of specific personal dispositions and family, school, and peer factors.

The newly developed Bullying and Victimization Scale for Youth (BVSY) focuses on both demographic and situational variables (e.g., how, when and where bullying and other forms of peer victimization may occur) and also its potential impact on the psychological well-being of youth through the lens of individual and ecological protective factors. Existing work examining the impact of bullying on social and emotional outcomes has focused almost exclusively on psychological distress including anxiety, depression, loss of interest in school, etc. One of the focal points in this project is on identifying the role of protective factors in outcomes related to experiencing victimization. We examine a range of environmental protective factors that may occur in schools, families, and peer groups. We also include personal dispositions and attitudes including optimism, hope, gratitude, and zest as insulative factors mediating the impact of victimization.
Our specific research questions were as follows:

- What are the prevalence rates of various forms of both traditional and cyber-victimization experiences for secondary age students in different areas of the Pac-Rim (i.e., Western U.S., China, India, Japan, Korea, Mexico, Thailand, Vietnam)?
- What is the degree of concordance between traditional and cyber forms of victimization for this population of students? To what extent are victims and perpetrators similar for both forms of victimization?
- Are there gender and developmental differences in the various forms of traditional and cyber-victimization?
- What are the short-term and long-term psychological, social, and emotional impacts of victimization experiences on secondary age students? How do students themselves perceive the severity of their victimization experiences?
- Can we identify victim and perpetrator subtypes related to these experiences?
- What is the impact of personal, family, peer, and school protective factors in mitigating the likelihood of engaging in victimization behavior or experiencing negative outcomes associated with victimization?

**Method**

**Participants**

Participants for this study included approximately 1200 public middle school and high school students in the Pacific North-
western region of the United States. The sample was largely Caucasian, with small percentages of students from Hispanic, Asian, and mixed race backgrounds. Approximately equal numbers of male and female students were included in the sample.

**Measures**

- The BVSY a self-report measure of bullying and peer-victimization and its potential impact on youth developed by selecting items from several existing scales including the California Bullying and Victimization Scale, the California Healthy Kids Survey Resiliency Module, the Strengths and Difficulties Scale, and various measures of positive psychological dispositions including the Gratitude Scale, the Life Orientation Test, the Grit Scale, and the Life Satisfaction Scale. We factor analyzed the scale items and reconstructed the scale to include those items that loaded most strongly on our subscales. Rather than explicitly defining bullying as hurtful, repetitive aggressive behavior occurring within the context of a power differential between bully and victim, we opted to simply identify those aggressive behaviors that were done in a “mean and hurtful way.” Thus, the BYSY is designed to include a wider range of peer victimization experiences than those identified by traditional bullying scales.

- California Bullying and Victimization Scale (CBVS). The CBVS (Felix et al., 2011) asks respondents if they experienced each of eight forms of victimization at school in the past month that was done “in a mean and hurtful way”: (a) teased or called names by another student; (b) rumors or gossip spread behind your back; (c) left out of a group or ignored on purpose; (d) hit, pushed, or physically hurt; (e) threatened; (f) had sexual comments, jokes, or gestures directed at you; (g) had your things stolen or damaged; (h) been teased, had rumors spread, or threatened through the Internet. There are eight corresponding items about engaging in the above types of aggression towards others. Students rate frequency of involvement on a five-point scale (never, once in the past month, 2 or 3 times in the past month, about once a week, and several times a week). Respondents reporting victimization experiences also completed questions assessing their feelings associated with being victimized (angry, scared, sad), why they felt they were treated this way (looks, gender, religion, sexual orientation, ethnicity, disability, other), and their degree of confidence with regard to effectively coping with these events in the future (“not at all confident” to “highly confident”).

- Cyberbullying Questionnaire (CQ). The nine-item CQ (Ang & Goh, 2010; Ang et al., 2011) was developed in Singapore for use with adolescents representing Chinese, Malay, and Indian ethnic backgrounds, predominantly. It is designed to assess the prevalence of various forms of aggressive behavior than can be delivered in cyberspace through email, texting, instant messaging, etc., or through social networking sites such as Facebook. Youth rate on a six-point Likert scale how often they engage in each type of cyberbullying assessed (“never” to “about a few times every week”). Corresponding items for experiencing victimization through cyberbullying were added for this study. Additionally, the CQ was modified to use the same response scale as the CBVS and, like the CBVS, we asked if the action was done “in a mean and hurtful way.”

- Subjective Happiness Scale (SHS). The SHS has four items that evaluate overall happiness or subjective well-being (Ly-
ubormirsky, ). A seven-point response scale is used to measure general happiness and sense of well-being compared to peers or other individuals.

• Strengths and Difficulties Questionnaire (SDQ). The SDQ is a brief behavioral screening questionnaire for use with adolescents. We adapted 10 items divided between two subscales: emotional symptoms (5 items) and conduct problems (5 items). The SDQ has been translated into numerous languages and dialects, including Chinese, Australian English, Korean, Malay, Thai, and Japanese. The SDQ performs as well as longer screening measures in identifying internalizing and externalizing behavior problems, and shows good convergent and discriminant validity (Goodman, 1997; Goodman & Scott, 1999).

• California Healthy Kids Survey (CHKS) – Resiliency Module. The Resiliency Module of the CHKS asks students to report on the degree of support they experience from teachers, family, and friends. The nine item responses are scored on a four point scale from “Strongly Agree” to “Strongly Disagree”. Based on previous research, we expect that support from these various sources will serve as protective factors against the potential negative impact of peer victimization experiences.

We also included three subscales from the CHKS Resiliency Module that measure positive psychological dispositions including self-efficacy, empathy, and self-awareness. These items are scored on a four point scale ranging from “Not at all like me” to “Very much like me”. Based on previous research, we were interested in the extent to which these dispositions served as personal protective factors against peer victimization experiences.

Procedure
This project was reviewed and approved by the Institutional Review Board at Southern Oregon University. The online version of the survey was assembled using Qualtrics and was administered to students in computer labs at participating schools. Survey data was imported into the Statistical Package for Social Sciences (SPSS; version 19) for subsequent analysis.

Preliminary results
Neila – I have a lot of data from the U.S. administration of the survey and can report the pieces of it that seem most relevant to the purposes of this paper. I’m including this section as a sample of what we might report.

Preliminary results from our data suggest that, for the sample as a whole, roughly 20% of students reported being bullied frequently and repeatedly over the preceding three months. Cyber-bullying was more prominent among females and increased with age from grades 8–10, then showed slight decreases. Cyber-bullying was particularly prevalent among students who were marginalized on the basis of ethnicity, SES, and sexual identity. Students who were cyber-bullied frequently reported significantly more mental health concerns including feelings of depression, anxiety, fear of school, and suicidal ideation. Additionally, there was less reported life satisfaction and happiness. Protective factors in the environment, including feelings of connectedness to school and family support, were important indictors of positive coping in response to bullying, particularly for younger students. Covitality, or the occurrence of multiple personal strengths and dispositions, was a very strong predictor of psychological well-being for all students in the sample. According to our data, although
students with high protective factor scores are no less likely to experience online victimization, they are better able to address these experiences in constructive ways, as evidenced by higher grade point averages, more positive attitudes toward school, and greater life satisfaction.

There is a moderate association between being an online victim of bullying and being an online bully oneself.

Online victimization is positively associated with conduct problems and negative emotional symptoms.

### TABLE 1. Correlation between victimization and outcome

<table>
<thead>
<tr>
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<th>Online Victim</th>
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<tr>
<td></td>
<td>Pearson Correlations</td>
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<td></td>
<td>r</td>
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<tr>
<td>Traditional Bully</td>
<td>.343</td>
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<tr>
<td>Online Bully</td>
<td>.494</td>
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<tr>
<td>Family Support</td>
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<tr>
<td>Peer Support</td>
<td>-.289</td>
</tr>
<tr>
<td>Teacher Support</td>
<td>-.257</td>
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<tr>
<td>Self Efficacy</td>
<td>-.140</td>
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<tr>
<td>Zest</td>
<td>-.093</td>
</tr>
<tr>
<td>Conduct Problems</td>
<td>.190</td>
</tr>
<tr>
<td>Self Awareness</td>
<td>-.161</td>
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</tbody>
</table>
In order to test the hypothesis that dispositional personal characteristics buffer an individual against the negative consequences of victimization, we created a Co-vitality scale including three important components of resiliency: Zest for Life, Subjective Well Being and Self Efficacy. Internal consistency of the scale was reasonably good (Scale $\alpha = .731$).

### TABLE 2. Predicting emotional reactions victimization Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized coefficients</th>
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<tr>
<td></td>
<td>B</td>
<td>Error Std.</td>
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<tr>
<td>1</td>
<td>(Constant)</td>
<td>1.519</td>
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<tr>
<td></td>
<td>Gender</td>
<td>.278</td>
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<tr>
<td></td>
<td>Online Victim</td>
<td>2.388</td>
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<td></td>
<td>Family Support</td>
<td>-0.048</td>
</tr>
<tr>
<td>2</td>
<td>(Constant)</td>
<td>1.956</td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td>2.878</td>
</tr>
<tr>
<td></td>
<td>Online Victim</td>
<td>2.388</td>
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<td>Family Support</td>
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<td>3</td>
<td>(Constant)</td>
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<td></td>
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<td>Family Support</td>
<td>-0.048</td>
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</tbody>
</table>

Variable dependiente: EmoSymMEDIA

Fuente: Elaboración propia
Aspects of Co-vitality, such as having a zest for life, high levels of subjective well being and (marginally) a sense of self efficacy act as buffers against the negative effects of online victimization $\beta = -.19, p = .000$.

The interaction between co vitality and family support is significant in the general sample $F(5,475) = 14.366, p = 000$ as well as in the subset of students reporting being bullied online at least once in the past month. In order to keep the focus on students experiencing cyber bullying, the regression summarized above includes only students who reported experiencing online victimization at least once in the past month.

**Discussion**

Preliminary results from our data suggest that protective factors including school, family, and peer support as well as positive personal attitudes and dispositions such as optimism, zest, and gratitude can serve as important factors in building resiliency in students in relation to the growing trend of cyberbullying (reference). According to our data, although students with high protective factor scores are no less likely to experience peer victimization, they are likely better able to address these experiences in constructive ways.

Teens who are who are bullied and otherwise harassed by peers report higher levels of depression, anxiety, and suicidal ideation, as well as impacted levels of positive psychological states and school performance (Hinduja & Patchin, 2010). Considering that more than a quarter of students surveyed reported that they have been the victim or perpetrator of traditional or online victimization (or both), it is essential that school personnel both acknowledge and address this troublesome behavior.

Although many schools are now developing comprehensive programs to combat “traditional” forms of bullying, cyber-bullying presents a new problem because it is not confined to the schoolyard and, therefore, cannot be as easily contained by teachers and administrators (Smith, 2012). Based on our research, one possible intervention would be to assist students in developing a range of protective factors that would include enhanced family, school, and peer support, as well as more positive personal attitudes and dispositions such as an increased sense of self-efficacy with regard to coping with both traditional and cyber forms of bullying.

Seligman and others (Seligman, 2111) have established that the intrapsychic factors of optimism, gratitude, hope, courage, etc. can be substantially influenced through simple and cost-effective interventions. Other research (reference) has shown that the social factors including peer and teacher support are also amenable to change. Given these two empirically validated interventions, and in reference to our results that those students with high protective factor scores are better able to navigate various forms of peer victimization, then interventions that focus on these factors are a logical step for schools and parents.
Bibliography


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